Application No. 10/648,494 Amendment dated: April 30, 2007

Reply to Office Action mailed January 29, 2007

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the Application.

- 1. (Cancelled)
- 2. (Previously Presented) A device in accordance with Claim 4, <u>45</u> further comprising a casing, said winding means being rotatably mounted to said casing.
- 3. (Original) A device in accordance with Claim 2, wherein said casing is sized and shaped so as to be gripped by a hand of a surgeon.
- 4. (Original) A device in accordance with Claim 3, wherein said winding means includes a winding tube rotatable about an axis, said winding tube being movable in an axial direction in response to its rotational movement.
- 5. (Original) A device in accordance with Claim 4, wherein said winding tube includes securing means for securing at least one portion of the suture thereto so as to cause the suture to wind about the helical member.
- 6. (Original) A device in accordance with Claim 5, wherein said securing means includes a groove formed in said winding tube and sized and shaped so as to receive at least one portion of the suture therein.
- 7. (Previously Presented) A device in accordance with Claim 6, wherein said groove is angled in a direction opposite to the direction of rotation of said winding tube during the winding of the suture about the helical member.
- 8. (Original) A device in accordance with Claim 7, wherein said winding tube includes a plurality of first screw threads formed thereon, said casing including a

Application No. 10/648,494

Amendment dated: April 30, 2007

Reply to Office Action mailed January 29, 2007

plurality of second screw threads mating with said first screw threads such that said winding tube is movable in said axial direction in response to its rotational movement.

9. (Cancelled)

10. (Currently Amended) A device in accordance with Claim 9 42, further

comprising supporting means for supporting the helical member during the winding of

the suture around the helical member.

11. (Currently Amended) A device in accordance with Claim 10, wherein said

supporting means includes further comprising a guide tube rotatably mounted in said

winding tube and rotatable relative thereto.

12. (Previously Presented) A device in accordance with Claim 11, wherein

said guide tube includes a coiled spiral member at an end thereof, said spiral member

being sized and shaped so as to receive the helical member therein during the winding

of the suture about the helical member.

13. (Currently Amended) A device in accordance with Claim 12, wherein said

guide tube is movable in said axial direction relative to said winding. tube in response to

the rotation of said guide tube.

14. (Previously Presented) A device in accordance with Claim 13, wherein

said guide tube has an opening extending through said spiral member, said opening

being sized and shaped so as to receive the helical member therein.

15. (Previously Presented) A device in accordance with Claim 14, wherein

said spiral member includes a plurality of lobes extending radially inwardly into said

opening, said lobes forming a plurality of spaces positioned radially outwardly from said

opening.

NJ 226177606v1 4/26/2007

Application No. 10/648,494 Amendment dated: April 30, 2007

Reply to Office Action mailed January 29, 2007

16. (Previously Presented) A device in accordance with Claim 15, wherein

said guide tube includes a plurality of third screw threads formed thereon, said casing

including a plurality of fourth screw threads mating with said third screw threads such

that said guide tube is movable in said axial direction in response to the rotational

movement of said guide tube.

17. (Previously Presented) A device in accordance with Claim 16, wherein

said guide tube includes a third gear mounted thereon, said casing including a second

actuator movably mounted on said casing and adapted for manual actuation by a

surgeon, said casing including a set of fourth gears, said third gear being engaged with

one of said fourth gears, said second actuator being engaged with another of said fourth

gears such that said third gear and hence said guide tube are rotatable in response to

the movement of said second actuator.

18. (Previously Presented) A device in accordance with Claim 17, further

comprising wherein said supporting means includes a support rod extending through

said guide tube for positioning the helical member in said opening of said spiral member

of said guide tube.

19. (Previously Presented) A device in accordance with Claim 18, wherein

said support rod includes a distal end sized and shaped so as to engage the helical

member.

20. (Previously Presented) A device in accordance with Claim 19, wherein

said distal end of said support rod is sized and shaped so as to engage the helical

member by a friction fit.

NJ 226177606v1 4/26/2007

Application No. 10/648,494 Amendment dated: April 30, 2007 Reply to Office Action mailed January 29, 2007

21. (Currently Amended) A device in accordance with Claim 19, wherein said support rod is sized and shaped so as to support <u>at least one</u> additional helical

members member thereon.

22. (Currently Amended) A device in accordance with Claim 21, further comprising advancing means for advancing the <u>at least one</u> additional helical members

member forward in said axial direction.

23. (Previously Presented) A device in accordance with Claim 22, wherein said advancing means includes a plunger mounted on said support rod, said plunger being movable in said axial direction.

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Currently Amended) A device in accordance with Claim 28, 45 wherein said guide tube is movable in an axial direction relative to said winding means. in response to the rotation of said guide tube.

30. (Currently Amended) A device in accordance with Claim 1, 45 further comprising wherein said supporting means comprises a support rod extending through said winding means for supporting the helical member in a fixed position relative to said winding means while said winding means winds the suture about the helical member.

Application No. 10/648,494 Amendment dated: April 30, 2007 Reply to Office Action mailed January 29, 2007

31. (Previously Presented) A device in accordance with Claim 30, wherein

said support rod includes a distal end sized and shaped so as to engage the helical

member by a friction fit.

32. (Currently Amended) A device in accordance with Claim 30, wherein said

support rod includes a distal end sized and shaped so as to engage the a plurality of

helical member members., said support rod being sized and shaped so as to support

additional coiled helical members thereon.

33. (Cancelled)

34. (Currently Amended) A device in accordance with Claim 33, 46 wherein

said winding means includes a winding tube rotatable about an axis, said winding tube

movable in an axial direction in response to its rotational movement.

35. (Currently Amended) A device in accordance with Claim 34, wherein said

winding tube includes securing means for securing at least one portion of the cord

thereto so as to cause the cord to wind about the helical member, said securing means

including a groove formed in said winding tube and sized and shaped so as to receive

at least one portion of the cord therein, said groove being angled in a direction

substantially opposite to the direction of rotation of said winding tube during the winding

of the cord about the helical member.

36. (Canceled)

37. (Currently Amended) A device in accordance with Claim 36 43, wherein

said guide tube is movable in said axial direction relative to said winding tube in

response to the rotation of said guide tube.

NJ 226177606v1 4/26/2007

38. (Currently Amended) A device in accordance with Claim 37, further comprising a supporting means for supporting the helical member during the winding of the suture around the helical member, said supporting means including a support rod extending through said guide tube for positioning the helical member in said spiral member of said guide tube.

- 39. (Previously Presented) A method of anchoring a suture used in a surgical procedure to a coiled helical member, comprising the steps of supporting the helical member relative to a winding tube; and moving said winding tube relative to the helical member such that the suture is wound about the helical member in a helical path so as to attach the suture to at least one turn of the helical member.
- 40. (Previously Presented) A method in accordance with Claim 39, wherein said winding tube is rotatable about an axis, said winding tube being movable in an axial direction in response to its rotational movement.
- 41. (Previously Presented) A method in accordance with Claim 40, wherein said supporting step includes the step of positioning the helical member in a coiled spiral member of a guide tube.
- 42. (New) A device for use in surgical procedure to anchor a suture to a coiled helical member, said device comprising winding means for winding a suture around the helical member in a helical path such that the suture is attached to at least one turn of the helical member, said winding means including

a winding tube rotatable around an axis, said winding tube including securing means for securing at least a portion of the suture thereto so as to cause the suture to wind about the helical member, said securing means including a groove

formed in said winding tube that is sized and shaped so as to receive at least a portion

of the suture therein, said groove being angled in a direction opposite to the direction of

rotation of said winding tube during the winding of the suture around the coiled helical

member, said winding tube further including a plurality of first screw threads formed

thereon, and a first gear mounted thereon; and

a casing that is sized and shaped so as to be gripped by the hand

of a surgeon, said casing having

a plurality of second screw threads mating with said first screw

threads such that said winding tube is mounted to said casing and rotatable relative

thereto and movable in an axial direction in response to its rotational movement,

a first actuator movably mounted on said casing and adapted for

manual activation by a surgeon, and

a set of second gears, said first gear being engaged with one of

said second gears, said first actuator being engaged with another of said second gears

such that said first gear and hence said winding tube are rotatable relative to said

casing in response to the movement of said first actuator.

43. (New) A device for anchoring a cord to a coiled helical member, said

device comprising

winding means for winding a cord about the helical member in a helical

path such that the cord is attached to at least one turn of the helical member, said

winding means including a winding tube rotatable about an axis and movable in an axial

direction in response to its rotational movement, said winding tube including securing

means for securing at least a portion of the cord thereto so as to cause the cord to wind

NJ 226177606v1 4/26/2007

about the coiled helical member, said securing means including a groove formed in said

winding tube that is sized and shaped so as to receive at least one portion of the cord

therein, said groove being angled in a direction substantially opposite to the direction of

rotation of said winding tube during the winding of the cord about the coiled helical

member; and

guiding means for guiding the winding of the cord in the helical path, said

guiding means including a guide tube mounted in said winding tube and rotatable

relative thereto, said guide tube including a coiled spiral member at an end thereof, said

spiral member being sized and shaped so as to receive the helical member therein

during the winding of the cord about the helical member.

44. (New) A device for use in a surgical procedure to anchor a suture to a

coiled helical member, said device comprising

winding means for winding the suture around the helical member in a

helical path such that the suture is attached to at least one turn of the helical member;

guiding means for guiding the winding of the suture in the helical path; and

supporting means for supporting the coiled helical member during the

winding of the suture around the helical member.

45. (New) A device in accordance with Claim 44, wherein said guiding means

comprises a guide tube including a coiled spiral member at an end thereof, said spiral

member being sized and shaped so as to receive the helical member therein during the

winding of the suture about the helical member.

46. (New) A device for anchoring a cord to a coiled helical member, said

device comprising

NJ 226177606v1 4/26/2007

winding means for winding the cord around the helical member in a helical

path such that the cord is attached to at least one turn of the helical member;

guiding means for guiding the winding of the cord in the helical path, said

guiding means including a guide tube having a coiled spiral member at an end thereof,

said spiral member being sized and shaped so as to receive the helical member therein

during the winding of the cord about the helical member; and

supporting means for supporting the helical member during the winding of

the cord around the helical member, said supporting means including a support rod

extending through said guide tube for positioning the helical member in said spiral

member of said guide tube.

NJ 226177606v1 4/26/2007